

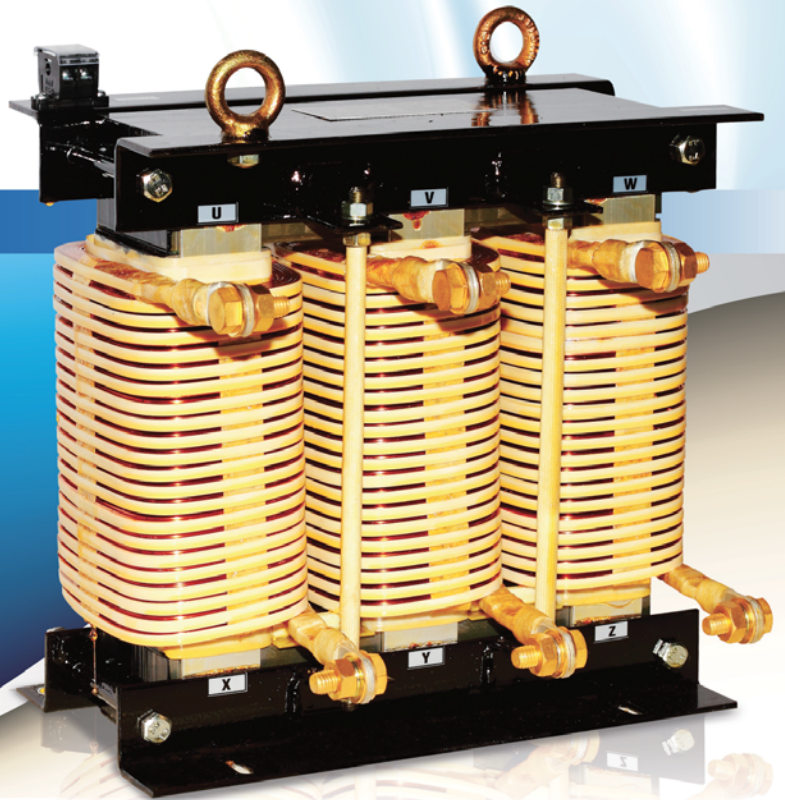


SHIZUKI

LOW VOLTAGE SERIES REACTOR

LRB-3 TYPE

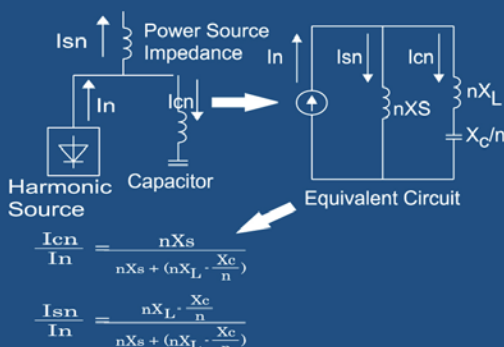
Solve your harmonic problems with Shizuki series reactor



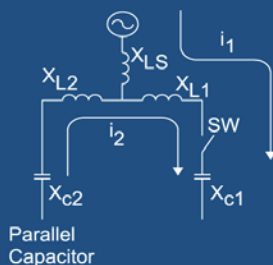
APPLICABLE STANDARD

The reactor are designed, manufactured and tested to meet the requirement of the latest standard IEC 60289, JIS C 4901

Why Series Reactors has been used ?
To Protect Capacitors From Harmonics.



Reduce Inrush Current



Inrush Current From Power Source

- Capacitors with no reactor
About 30-100times rated current
- Capacitors with a 6% reactor
About 5times rated current

Inrush Current from Energized parallel capacitor

- Capacitors with no reactor
About 200-400times rated current
- Capacitors with a 6% reactor
About 5-6times rated current

LOW VOLTAGE SERIES REACTOR TYPE LRB-3 (DRY TYPE INDOOR USE)

Solve your harmonic problems with Shizuki series reactors

OPERATING CONDITIONS

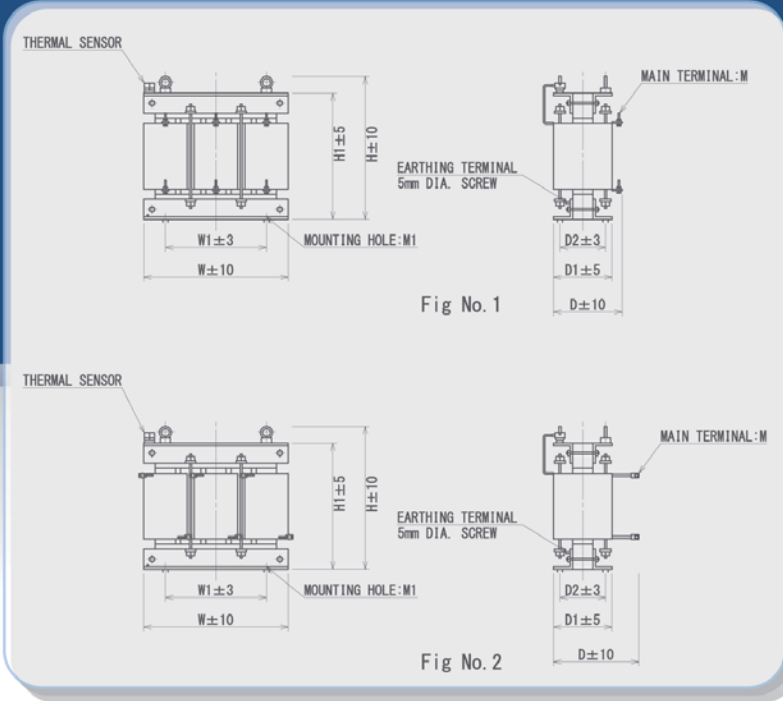
1. Installation : Indoor use
2. Ambient temperature : -20°C +50°C
24h average : +45°Cmax Annual average : +35°Cmax
3. Relative humidity : Not more than 85%
4. Altitude : Not exceeding 2,000 meters
above sea level

TYPE AND RATINGS

1. Type : LRB-3
2. System voltage : 210, 400VAC
3. Rated frequency : 50 Hz
4. Number of phase : Three phase
5. Insulation class : F (155°C)
6. Reactance : 6%, 15 = 35%

ELECTRICAL CHARACTERISTICS

1. Output tolerance : -5% to +10%
2. Withstand voltage test : Between terminals connected together and core and between terminals. 3k volts, 1 minute.
3. Maximum permissible current : Maximum permissible current shall be 120% of the rated current. If the 5th harmonic is contained, it is defined as a rms value of the resultant current with the 5th harmonic current not exceeding 35% of the fundamental current.
4. Maximum permissible momentary current : Maximum permissible momentary current shall be 25 times the rated current for 2 seconds Reactors shall not have thermal or mechanical damages when subjected to the above current.
5. Temperature rise : The temperature of the winding, when it has reached a constant value after 125% of the rated current is applied continually at the rated frequency. Shall not exceed 85°C.
6. Thermal sensor : Temp. setting 125°C, Contact Normally Close, 250VAC 7.2Amp.



RATING AND DIMENSION (L = 6%) FOR RG-2 CAPACITOR 230 VAC

NO.	SYSTEM VOLT.	CAP. VOLT.	EQUIPMENT OUTPUT (kvar)	CAPACITOR OUTPUT (kvar)	REACTOR OUTPUT (kvar)	PART NO.	DIMENSION (mm.)						M (mm.)	M1 (mm.)	GROSS MASS (kg.)	FIG NO.	
							W	W1	H	H1	D	D1					D2
1	210 V	230 V	13.3	15	0.849	LRB21B5013N16	240	160	240	200	165	120	90	M8	8	19	1
2			17.7	20	1.13	LRB21B5018N16	240	160	240	200	180	135	105	M8	8	23	
3			22.2	25	1.42	LRB21B5022N16	240	160	240	200	195	150	120	M8	8	26	
4			26.6	30	1.70	LRB21B5027N16	240	160	240	200	190	145	115	M8	8	26	2
5			35.5	40	2.26	LRB21B5036N16	240	160	240	200	195	145	115	M10	8	28	
6			44.3	50	2.83	LRB21B5044N16	270	180	265	225	180	130	100	M10	8	29	

RATING AND DIMENSION (L = 6%) FOR RG-2 CAPACITOR 440 VAC

NO.	SYSTEM VOLT.	CAP. VOLT.	EQUIPMENT OUTPUT (kvar)	CAPACITOR OUTPUT (kvar)	REACTOR OUTPUT (kvar)	PART NO.	DIMENSION (mm.)						M (mm.)	M1 (mm.)	GROSS MASS (kg.)	FIG NO.	
							W	W1	H	H1	D	D1					D2
1	400 V	440 V	8.79	10	0.561	LRB40B5009N16	225	150	225	180	155	105	75	M8	8	14	1
2			13.2	15	0.842	LRB40B5013N16	225	150	235	190	165	120	90	M8	8	18	
3			17.6	20	1.12	LRB40B5018N16	240	160	235	190	165	120	90	M8	8	20	
4			22.0	25	1.40	LRB40B5022N16	240	160	265	220	180	140	110	M8	8	26	2
5			26.4	30	1.68	LRB40B5026N16	240	160	345	300	195	155	115	M8	8	35	
6			35.2	40	2.25	LRB40B5035N16	240	160	345	300	195	155	115	M8	8	36	
7			44.0	50	2.81	LRB40B5044N16	240	160	345	300	205	165	125	M8	8	41	
8			52.8	60	3.37	LRB40B5053N16	255	170	350	305	205	165	125	M8	8	43	
9			65.9	75	4.21	LRB40B5066N16	300	200	325	280	210	165	125	M10	8	45	
10			74.7	85	4.77	LRB40B5075N16	300	200	325	280	210	165	125	M10	8	46	
11			87.9	100	5.61	LRB40B5088N16	300	200	325	280	220	165	125	M10	8	50	
12			106	120	6.73	LRB40B5106N16	300	200	325	280	225	175	135	M10	8	56	

Reactance : L=6%

System Voltage : 210,400 VAC Other circuit voltages rated are also available.